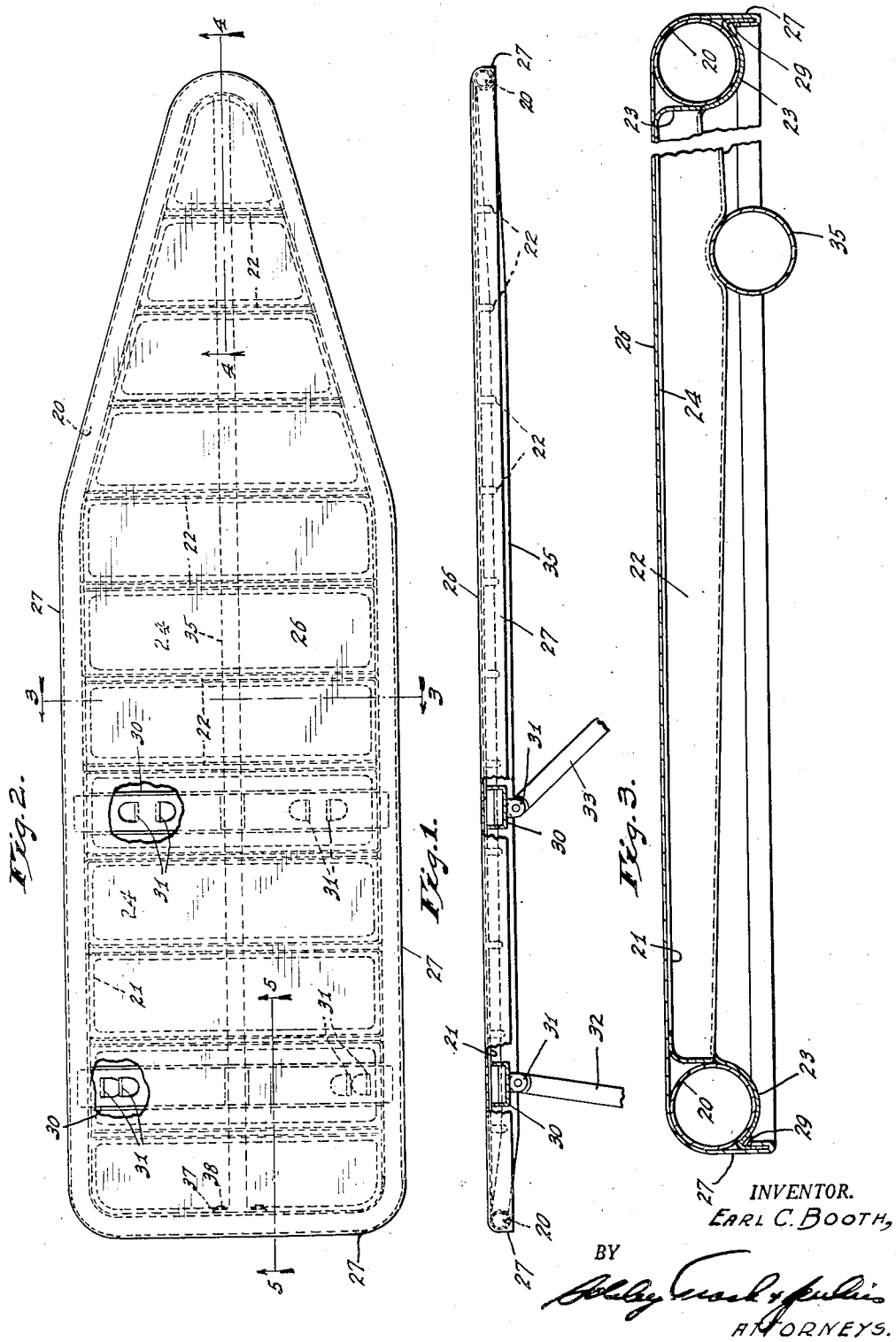
March 8, 1949. E. C. BOOTH 2,464,170

METAL TOP FOR IRONING BOARDS

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METAL TOP FOR IRONING BOARDS

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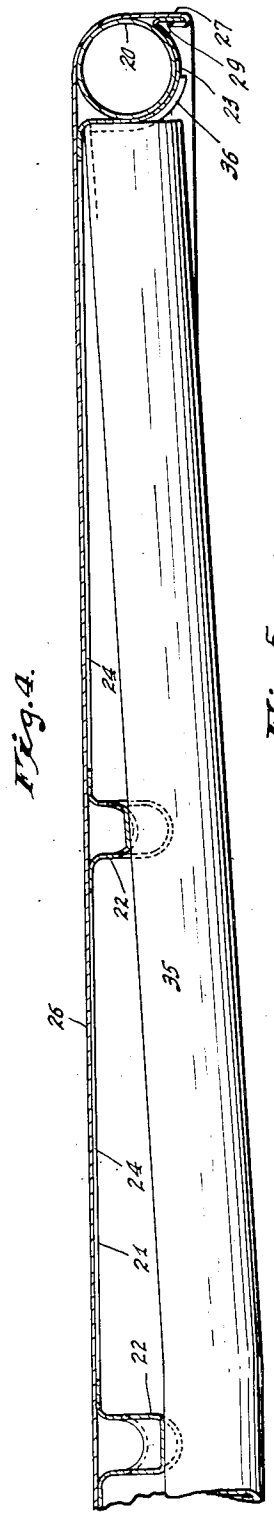


Fig. 4.

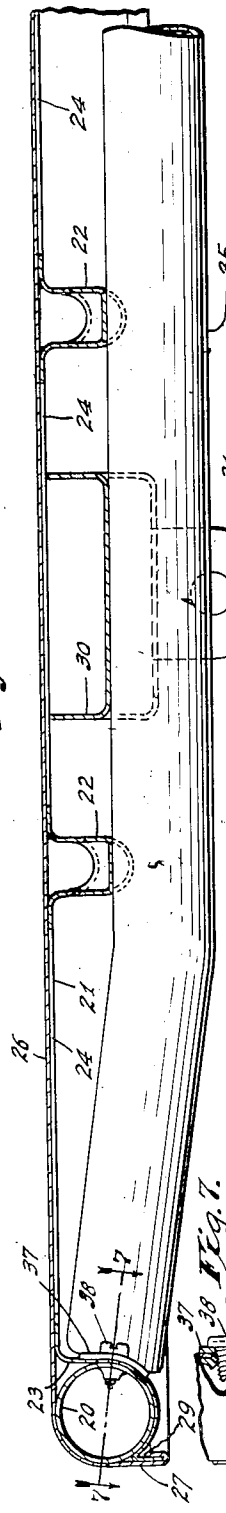


Fig. 5.

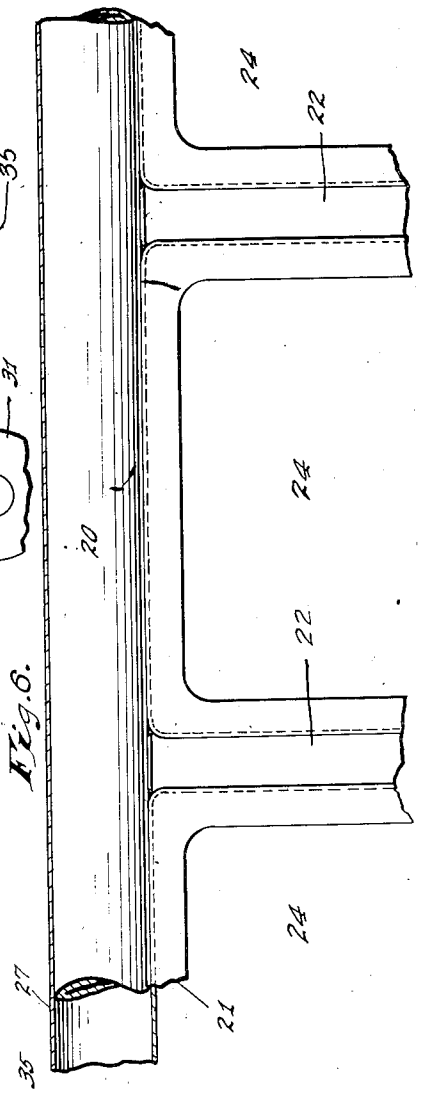


Fig. 6.

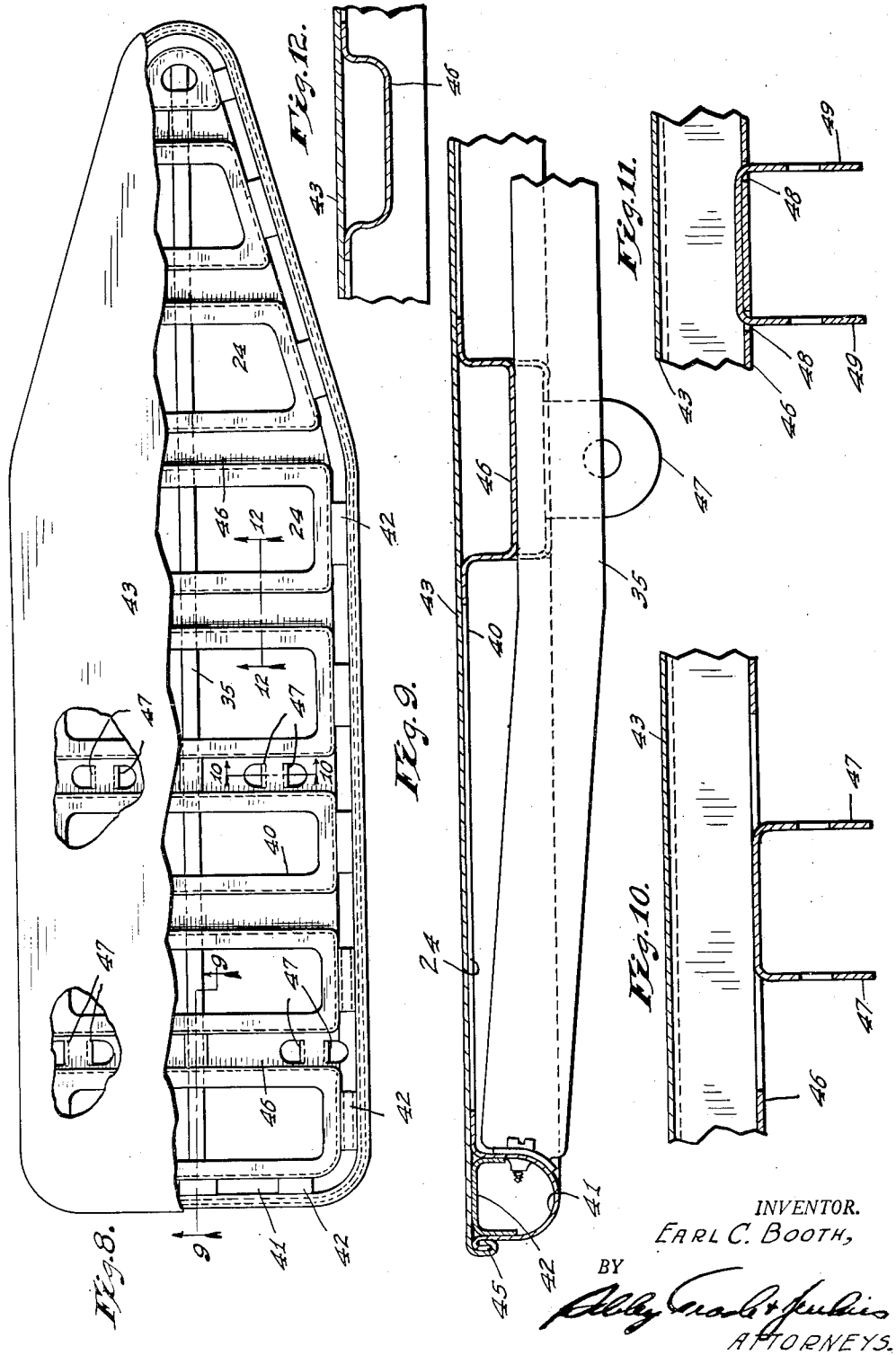
Fig. 7.

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Fig. 13.

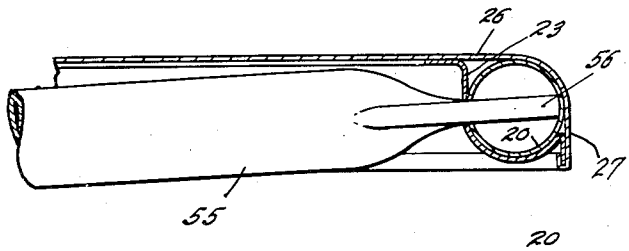


Fig. 14.

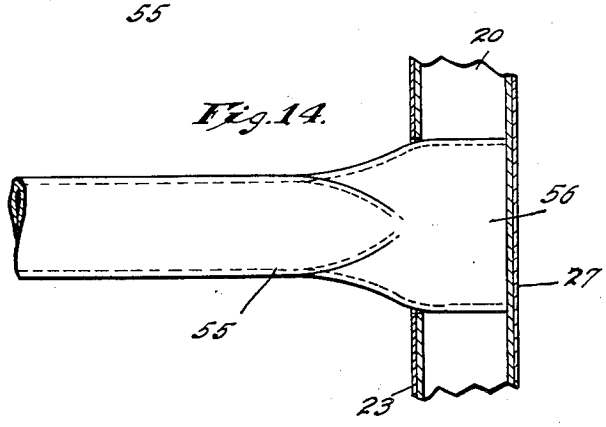
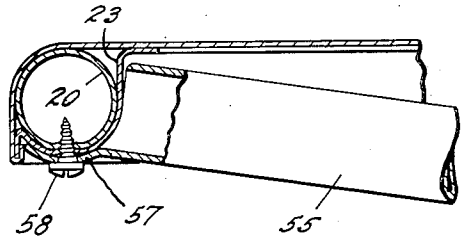


Fig. 15.



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METAL TOP FOR IRONING BOARDS

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Application October 1, 1945, Serial No. 619,555

7 Claims. (Cl. 38—137)

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It is an object of my invention to produce an ironing-board, and more particularly an ironing-board top, which will be sturdy and durable. More especially, it is my object to produce an ironing-board top which will lend itself to construction of sheet-metal and which can be simply and economically manufactured.

In carrying out my invention, I form the top of two layers of sheet metal, the bottom layer of which forms a reinforcement and support for the upper layer, or cover. The bottom, or reinforcing, layer is formed with a series of transversely extending stiffening ribs the metal between which may be removed to lighten the construction and to facilitate the drawing of the metal incident to formation of the ribs. The ironing-board top has a peripheral reinforcement, which may be a separate element formed of metal tubing; and the entire top is stiffened by a truss brace which extends longitudinally of the top and has its ends secured to the peripheral reinforcement. The cover, or upper layer, of the ironing-board top overlies the reinforcement and has its edges turned downwardly and secured to the remainder of the top in any appropriate manner.

The accompanying drawings illustrate my invention: Fig. 1 is a side elevation of an ironing-board top; Fig. 2 is a plan view of the top; Fig. 3 is a transverse section on an enlarged scale on the line 3—3 of Fig. 2; Figs. 4 and 5 are fragmental longitudinal sections on the lines 4—4 and 5—5 respectively of Fig. 2; Fig. 6 is a fragmental plan view on an enlarged scale with the sheet-metal cover broken away; Fig. 7 is a fragmental section on the line 7—7 of Fig. 5; Fig. 8 is a plan view of a modified form of construction; Fig. 9 is a fragmental longitudinal section on the line 9—9 of Fig. 8; Fig. 10 is a transverse vertical section on the line 10—10 of Fig. 8; Fig. 11 is a view similar to Fig. 10 illustrating a further modification; Fig. 12 is a section on the line 12—12 of Fig. 8; Fig. 13 is a fragmental view similar to Fig. 4 illustrating a modified means of attaching one end of the truss brace; Fig. 14 is a plan view in partial section of the construction illustrated in Fig. 13; and Fig. 15 is a view similar to Fig. 5 illustrating the attachment of the other end of the truss brace shown in Figs. 13 and 14.

In the modification of my invention illustrated in Figs. 1 to 7 inclusive, the ironing-board top is surrounded by a peripheral reinforcing member 20 of tubular cross-section bent into the desired shape. Associated with the border frame 20 there is a reinforcement 21 of sheet metal

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formed with longitudinally spaced, transversely extending depressed portions 22 of channel section which constitute reinforcing ribs. As will be clear from Fig. 3, the ribs 22 are desirably of gradually decreasing depth from the longitudinal center-line of the ironing-board top toward its edges and terminate closely adjacent the inner face of the border frame 20. Around its periphery, the top-forming member 21 is provided with a down-turned flange 23 formed in cross-section to provide a seat for the border frame. To lighten the construction and to facilitate the formation of the stiffening ribs 22, the sheet-metal between such ribs may be removed to leave openings 24.

Overlying the reinforcement 21, I provide a sheet-metal cover 26 which, in the form shown, is imperforate. Around its periphery, the cover 26 is provided with a down-turned flange 27 which closely receives the tubular border frame 20, as will be clear from Figs. 3, 4, and 5. Outwardly beyond its area of contact with the border frame 20, the flange 23 on the reinforcement 21 is bent downwardly to form a lip 29 lying against the inner face of the flange 27, and the lower edge of such flange is folded over the edge of the lip 29 to hold the assembly together.

In the form of top illustrated in Figs. 1 to 7 inclusive, the reinforcing ribs 22 are relatively narrow. To equip such a top with means for the attachment of supporting legs, I may provide a pair of cross-members 30 secured at their ends in any convenient manner to the tubular border member 20. The cross members 30, which desirably are formed of sheet-metal stampings of channel cross-section, are provided with ears 31 to which the legs 32 and 33 of any desired type of supporting structure are attached.

The top as so far described is reinforced longitudinally by a truss brace member 35 conveniently formed of metal tubing. The brace 35 lies against the lower surfaces of the ribs 22 and cross members 30, which may be recessed to receive it, and is secured at its ends to the border frame 20. As shown in Fig. 4, a sheet-metal retainer 36 is welded to the flange 23 and received within the brace 35 to locate it at the narrow end of the top; while at the opposite end of the top the brace is provided, as shown in Figs. 5 and 7, with out-bent ears 37 secured to the border frame 20 and flange 23 by screws 38, preferably of the self-tapping variety.

In the modified form of the invention illustrated in Figs. 8 to 12 inclusive, the cross members 30 and the tubular border frame 20, as separate elements, are eliminated. In this modifi-

cation, the reinforcement 40 is formed to provide around its periphery a channel-like groove 41, the open upper face of which is bridged at intervals with U-shaped spacers 42 having down-turned side edges forming flanges which are received between the side walls of the groove 41 and which are secured thereto, as by spot welding. The cover 43 extends over the groove 41 throughout the periphery of the top and has its edge portion bent downwardly and interlocked with the edge of the reinforcement 40 to form a lock seam, as indicated at 45 in Fig. 9.

The reinforcement 40 shown in Figs. 8 to 12 is provided with transversely extending depressed portions 46 which correspond to the stiffening ribs 22 in the arrangement illustrated in Figs. 1 to 7, but which are considerably wider than such reinforcing ribs. For the purpose of securing the top to the legs of a supporting structure, portions of the bottoms of certain reinforcing ribs are struck downwardly to form tongues 47 arranged in pairs and between which the supporting legs may be pivotally mounted.

Instead of mounting the legs through the medium of ears 47 struck from the material of the ribs 46, such ribs may be provided with pairs of slots 48 (Fig. 11) each pair of which is adapted to receive the two parallel legs 49 of a U-shaped bracket which is secured to the bottom of the rib 46 as by spot-welding.

The ironing-board top shown in Figs. 8 to 12 is provided with the same longitudinally extending truss brace 35 as is embodied in the modification shown in Figs. 1 to 7.

In Figs. 13 to 15, I have illustrated a modified means of securing the truss brace to the top. As will be apparent from those figures, one end of the brace 55 is flattened as indicated at 56, and the wall of the tubular border frame 20, as well as the flange 23, is pierced to permit such flattened portion 56 to extend therethrough and abut against the opposite wall of the top. At its opposite end, the brace 55 is trimmed to abut against the inner face of the flange 23 and to provide an ear 57 which is secured to the tubular border member 20 as by a self-tapping screw 58.

All forms of the invention shown and described are characterized by the two-layer, sheet-metal top, the lower layer being formed to provide transverse stiffening ribs, the formation of which is facilitated by the openings 24, and the upper layer being smooth and plane. In addition, all forms possess a peripheral reinforcement providing the stiffness, strength, and light weight of a hollow section, whether that reinforcement be the separate tubular element 20 or the groove 41 closed in large part by the spacers 42 and entirely by the cover 43.

I claim as my invention:

1. In an ironing-board top, a peripheral frame, a lower sheet-metal member having a central portion disposed within said frame and substantially flush with the top thereof, said central portion being provided with a plurality of depressed portions forming stiffening ribs extending laterally of said peripheral frame between the sides thereof, said central portion being provided with openings between said ribs, the peripheral portion of said lower sheet-metal member being depressed to form a seat for said frame, and an upper sheet-metal member overlying said lower member and frame, the peripheral portion of said upper member being bent downwardly outside said frame, and the edges of said upper and lower members being secured together.

2. In an ironing-board top, a peripheral frame, a lower sheet-metal member having a central portion disposed within said frame and substantially flush with the top thereof, said central portion being provided with a plurality of depressed portions forming stiffening ribs extending laterally of said peripheral frame between the sides thereof, the peripheral portion of said lower sheet-metal member being depressed to form a seat for said frame, and an upper sheet-metal member overlying said lower member and frame, the peripheral portion of said upper member being bent downwardly outside said frame, and the edges of said upper and lower members being secured together.

3. In an ironing-board top, a peripheral frame, a lower sheet-metal member having a central portion disposed within said frame and substantially flush with the top thereof, said central portion being provided with a plurality of depressed portions forming stiffening ribs extending laterally of said peripheral frame between the sides thereof, the peripheral portion of said lower sheet-metal member being depressed to form a seat for said frame, and an upper sheet-metal member overlying said lower member and frame, the peripheral portion of said upper member being bent downwardly outside said frame.

4. In an ironing-board top, a lower sheet-metal member formed at its periphery to provide an upwardly presented groove, the central portion of said lower member being depressed at longitudinally spaced intervals to form laterally extending stiffening ribs, an upper sheet-metal member overlying said lower member, a reinforcing member disposed between said upper member and the groove-forming peripheral portion of said lower member, the edge portion of said upper member being bent downwardly outside said reinforcing members and secured to the edge of said lower member.

5. The invention set forth in claim 4 with the addition that the peripheral groove in said lower member has opposed side walls, said reinforcing member being a sheet-metal element having a central portion substantially flush with the central portion of the lower member and down-turned side portions engaging and secured to the opposed walls of said groove.

6. The invention set forth in claim 3 with the addition of a longitudinal truss-brace having a central portion engaging the lower surfaces of said ribs and up-bent end portions secured to said frame.

7. In combination, an ironing-board top as set forth in claim 4 with the addition of supporting legs pivotally mounted on certain of said ribs.

EARL C. BOOTH.

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Certificate of Correction

Patent No. 2,464,170. March 8, 1949.

EARL C. BOOTH

It is hereby certified that the name of the assignee in the above numbered patent was erroneously written and printed as "Noflitt-Sparks Industries, Inc." whereas said name should have been written and printed as *Noblitt-Sparks Industries, Inc.*, as shown by the record of assignments in this office;

and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 13th day of September, A. D. 1949.

[SEAL]

JOE E. DANIELS,
Assistant Commissioner of Patents.